What is claimed is:

1. A composite which is obtained by heating and drying of a mixture of a carrier in powder form, and a metal hydroxide in powder form or in molten form.

2. The composite according to Claim 1, wherein the heating proceeds at a temperature of not less than 80 °C to less than 200 °C.

3. The composite according to Claim 1, wherein the heating proceeds at a temperature of not less than 200 °C to less than 400 °C.

4. The composite according to Claim 1, wherein the carrier is a porous material.

5. The composite according to Claim 4, wherein the porous material is a heat resistant inorganic substance.

6. The composite according to Claim 5, wherein the heat resistant inorganic substance is silica or alumina.

7. The composite according to Claim 1, wherein the carrier is a carbonaceous material.

8. The composite according to Claim 7, wherein the carbonaceous material is coal, petroleum, an infusibilized product or heat-treated product after infusibilization of a synthetic

pitch, or an active carbon.

9. The composite according to Claim 1, wherein the metal hydroxide is potassium hydroxide or sodium hydroxide.

10. The composite according to Claim 1, wherein a mean particle size of the carrier before mixing is 0.1 mm or less, and a mean particle size of the metal hydroxide is 1 mm or less.

11. The composite according to Claim 1, wherein the metal hydroxide is mixed in an amount of 1 to 1000 parts by weight per 100 parts by weight of the carrier.

12. The composite according to Claim 1, wherein no peak derived from metal hydroxide crystals is present in an X-ray diffraction intensity curve of the composite.

13. The composite according to Claim 1, wherein no background peak derived from water is present in an X-ray diffraction intensity curve of the composite.

14. The composite according to Claim 1, which is a catalyst for an isomerization reaction of an olefin.

15. The composite according to Claim 1, which is a catalyst for an oxidation reaction of alcohols.

16. A method for manufacturing a composite, comprising:

mixing a carrier in powder form and a metal hydroxide in powder form and heating and drying the resulting mixture under a gas flow or under reduced pressure.

17. The method according to Claim 16, wherein the gas is air, an inert gas or a mixture thereof.

18. The method according to Claim 16, wherein the heating proceeds at a temperature of not less than 80 to less than 200 °C.

19. The method according to Claim 16, wherein the heating proceeds at a temperature of not less than 200 °C to less than 400 °C.